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## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### Listing of claims:

(Currently amended) An x-ray tube comprising:
 an envelope which defines an evacuated chamber;
 a source of electrons;

an anode mounted within the chamber for rotation about an axis of rotation, the anode defining a sloped peripheral region on which a target area is defined, which target area is struck by electrons emitted by the electron source and emits x-rays, the sloped peripheral region including a first annular portion, sloped at first angle relative to a plane perpendicular to the axis of rotation, and a second annular portion, adjacent the first portion, sloped at a second angle, relative to the plane, the second angle being different from the first angle, the target area being defined partially on the first annular portion and partially on the second annular portion, wherein the source of electrons includes a filament having a greater width in a region of the filament which emits electrons that strike the portion of the target area on the first annular portion and a smaller width in a region which emits electrons which strike the portion of the target area on the second annular portion.

- 2. (Previously presented) The x-ray tube of claim 1, wherein the first annular portion is closer to a periphery of the anode than the second portion.
- 3. (Previously presented) The x-ray tube of claim 1, wherein the first angle and the second angle differ by at least 1°.
- 4. (Previously presented) The x-ray tube of claim 3, wherein the first and second angles differ by at least 2°.

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- 5. (Previously presented) The x-ray tube of claim 1, wherein the first angle is less than about 8°.
- 6. (Previously presented) The x-ray tube of claim 1, wherein the first angle is from about 6° to about 8°.
- 7. (Previously presented) The x-ray tube of claim 5, wherein the first angle is about 7°.
- 8. (Previously presented) The x-ray tube of claim 6, wherein the second angle is at least 8°.
- 9. (Previously presented) The x-ray tube of claim 8, wherein the second angle is about 10°.
- 10. (Previously presented) The x-ray tube of claim 1, further including:
  an annular transition portion intermediate the first and second portions, the
  transition portion defining a smooth, curved transition between the first portion and the
  second portion.
- 11. (Previously presented) The x-ray tube of claim 10, wherein the transition portion curves gradually from the first portion to the second portion, the transition portion sloped at the first angle adjacent the first portion and sloped at the second angle adjacent the second portion.
- 12. (Previously presented) The x-ray tube of claim 1, wherein the second portion increases in slope with distance from the first portion.
- 13. (Previously presented) The x-ray tube of claim 1, wherein the first angle is smaller than the second angle, and the electron source is configured to deliver substantially the

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same specific load to the portion of the target area on the first portion than to the portion of the target area on the second portion.

#### 14. (Cancelled)

- 15. (Currently amended) The x-ray tube of claim [[15]]  $\underline{1}$ , wherein the width of the filament varies such that the width is inversely proportional to a tangent of an angle of a slope of a region of the target area that is struck by the electrons from the region of the filament.
- 16. (Previously presented) A computed tomography (CT) scanner including the x-ray tube of claim 1.
- 17. (Previously presented) The CT scanner of claim 16, wherein the CT scanner includes at least one x-ray detector and a reconstruction processor, the reconstruction processor being programmed to account for a higher x-ray flux from the first annular portion than from the second annular portion.
- 18. (Currently amended) A method for generating a beam of x-rays, comprising: accelerating and focusing a beam of electrons; and

striking a target area on a sloping peripheral region of an anode that rotates about an axis of rotation, the peripheral region including a first annular portion sloped at first angle relative to a plane perpendicular to the axis of rotation, and a second annular portion, radially spaced from the first annular portion and sloped at a second angle relative to the plane, the second angle being different from the first angle, the target area being defined partially on the first annular portion and partially on the second annular portion; and

generating electrons such that a portion of the electron beam which strikes the target area on the first annular portion has a greater electron current density than a portion of the electron beam which strikes the part of the target on the second annular portion.

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## 19. (Cancelled)

- 20. (Previously presented) The method of claim [[19]] 18, wherein the angle at which the first annular portion is sloped is smaller than the angle at which the second annular portion is sloped.
- 21. (Previously presented) The method of claim 18, further including:
  directing the x-rays towards a subject;
  detecting x-rays passing through the subject with a detector; and
  reconstructing an image of the subject, including accounting for a larger flux of xrays from the part of the target area on the first annular portion than from the part of the
  target area on the second annular portion.

# 22. (New) An x-ray tube, comprising:

an anode that rotates about an axis of rotation, the anode includes a sloped peripheral region upon which a target area is defined, wherein the sloped peripheral region includes:

a first annular portion that is sloped at a first angle relative to a plane perpendicular to the axis of rotation; and

a second annular portion adjacent to the first annular portion, wherein the second annular portion is sloped at a second angle relative to the plane, the second angle being different from the first angle; and

an electron source that emits electrons towards the target area such that a portion of the electron beam that strikes the target area on the first annular portion has a greater electron current density than a portion of the electron beam which strikes the target area on the second annular portion.